

SONNEBORN'S

LAPIDOLITH LIQUID

THE PATENTED

LIQUID HARDENER and
DUSTPROOFER for
CONCRETE and
TERRAZZO FLOORS

NICK REIDY
SALES & WAREHOUSE
4971 FYLER AVE.
FL 4000

NOTE TO MAINTENANCE ENGINEERS

For your convenience we have combined
in this one folder a brief description of
what Lapidolith Liquid is and how it can
be used by you in your plant. If you need
additional copies for cross-filing, or more
information on Lapidolith Liquid or its
application, please write our main office.



$100^{\frac{1}{4}} \text{ per gal (3 coats)} = \$1.75 \text{ less } 10\% =$

● THE CONCRETE HARDENER THAT CANNOT BE COPIED

In the early 1900's Sonneborn introduced the simple and effective method of dustproofing and hardening concrete floors by a chemical hardener known as Lapidolith Liquid. For years this fine product has been used in countless factories, schools, and other buildings from coast to coast. Hundreds of testimonials praise its effectiveness.

Our laboratories have recently developed a radical improvement in Lapidolith Liquid which increases notably the extent to which it penetrates into the structure of the concrete, and assures even more lasting hardening action than has ever before been possible. This improvement is so basic in fact, that the U. S. and British Patent Offices recognized this invention and Lapidolith Liquid is now protected by both U. S. and British patents.

● IMPROVED WETTING ACTION, SPREADING EFFICIENCY AND PENETRATION

Two unique and outstanding discoveries were the basis for securing the patents.

1. Lapidolith Liquid has at least 100% lower surface tension than any concrete floor hardening solution of the same concentration. This means deeper penetration—more thorough hardening.
2. The low surface tension assures a more effective reaction with the lime and calcium carbonate in the cement because Lapidolith Liquid reaches into the tiny voids and capillaries which ordinary hardeners cannot penetrate.

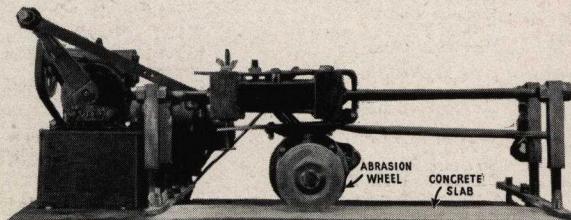
This effective penetration prevents the "blocking off" caused by surface reactions to which ordinary liquid hardeners are so frequently subject.

NOT ONE, BUT MANY TESTS PROVE IT

FOR HARDNESS ON HEAVY DUTY FLOORS

The degree of hardness imparted to concrete by Lapidolith Liquid is confirmed by the following scientific evaluations:*

Taking the abrasion index of untreated 1:2 concrete as 100, scientific tests, conducted by independent laboratories, of the effectiveness of Lapidolith Liquid in hardening concrete, have shown that the treatment raises the abrasion index of the concrete to 225 or more than twice the value for the untreated surface. By comparison, a hardening treatment based on the use of surface aggregates raised the abrasion index to 167 or only two-thirds above the value of the untreated concrete.



* Obtained with modified Dorry Abrasion Testing Machine, illustrated herewith.

FOR DUSTPROOFNESS

Concrete cubes, two weeks old, some treated with Lapidolith Liquid and some untreated show the following comparison after 200 revolutions of an abrasive disc.

	Grams
Untreated sample weighed before test	750
After the test	429
Loss in weight 41% or	321
Lapidolized sample weighed before the test	770
After the test	742
Loss of only 3½% or	28

The above tests confirm over a quarter of a century's experience in the treatment of millions of square feet of concrete. Lapidolized concrete attains a degree of hardness which, when subjected to traffic, virtually makes it immune to dusting—concrete dust is usually the first sign of concrete disintegration.

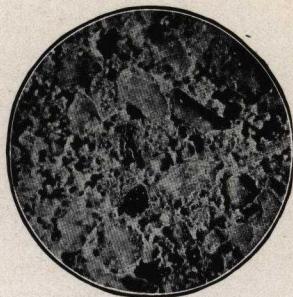
● SEE FOR YOURSELF HOW LAPIDOLITH LIQUID WORKS



50 diameters

UNTREATED CONCRETE

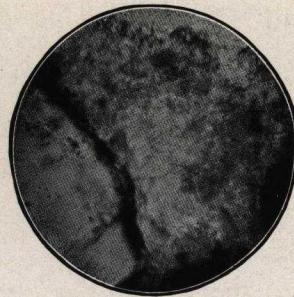
Note the large numerous voids (black spots) and the roughness of the surface.



50 diameters

LAPIDOLIZED CONCRETE

Note the roughness is reduced and the voids have been filled by a network of a newly formed hard crystalline substance.



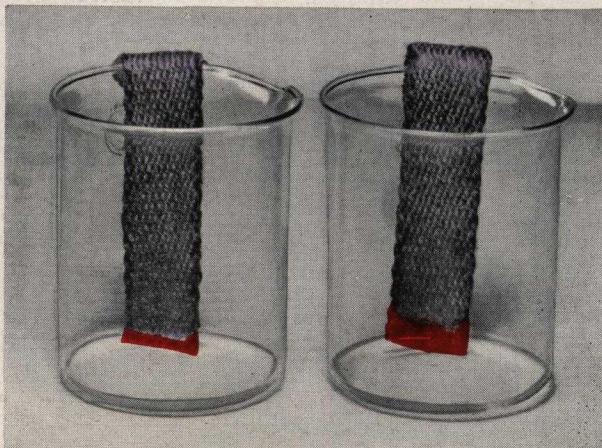
120 diameters

LAPIDOLIZED CONCRETE

Note the new component formed by the action of Lapidolith on the cement matrix. An isometric crystal form is indicated.

PROVE THE SUPERIORITY OF SONNEBORN'S

FOR PENETRATION OF LAPIDOLITH LIQUID



Graphic proof of the more effective penetration of Sonneborn's patented Lapidolith Liquid is shown by the following test which was made at the Foster D. Snell, Inc., Laboratories:

In the photograph are two glass beakers, the one on the right contains Lapidolith Liquid to a depth of one-tenth inch, the one on the left 20° Baumé

Solution of commercial silico-fluoride in the same amount.

Duplicate cotton wicks previously treated with blue litmus solution and dried were placed as shown in a vertical position. Since both solutions are acid in reaction to litmus, the wicks turn red at the line of contact.

But Patented Lapidolith Liquid, due to its superior wetting action, rose in the wick to nearly three-eighths inch within a half hour while the solution of the commercial silico-fluoride barely rose beyond the line of contact.

• • •

Here's what the Snell Laboratories say:

"The accompanying photograph is a clear and accurate record of the results obtained. . . . It demonstrates clearly that Lapidolith Liquid has a much greater wetting power than an ordinary aqueous solution of commercial magnesium silico-fluoride of approximately the same density."

WHAT SONNEBORN'S PATENTED LAPIDOLITH LIQUID WILL DO

- Will wearproof concrete floors.
- Will dustproof concrete floors.
- Will harden concrete floors.
- Will strengthen concrete wainscoting.
- Will harden floors containing iron filings or other special aggregate.
- Will waterproof and oilproof concrete floors, walls and containers.

WHAT SONNEBORN'S PATENTED LAPIDOLITH LIQUID WILL NOT DO

- Will not make a pitted floor smooth.
- Will not color concrete floors.
- Will not cover floors with a film.
- Cannot be used on any floor which does not absorb water, such as painted floors.
- Should not be mixed with concrete.

Concrete floors treated with Lapidolith Liquid may be painted with Sonneborn's Cemcoat for floors.

S PATENTED LAPIDOLITH LIQUID

FOR PERMEABILITY

Extensive tests were made and water forced under 30 lbs. pressure through pipes filled with untreated concrete and Lapidolized concrete. These tests showed that Lapidolized concrete absorbs only one-tenth as much water as untreated concrete. The figures below represent cu. cm. of water which permeated the bodies of concrete in given time:

Time Water Permeated	Untreated Concrete	Lapidolized Concrete
1st min.	1.132 cu. cm.	0.135 cu. cm.
30th min.	0.186 cu. cm.	0.074 cu. cm.
60th min.	0.174 cu. cm.	0.046 cu. cm.

Because Lapidolith Liquid reduces the permeability of concrete, it reduces the risk of damage from freezing during the winter months.

FOR PROTECTION AGAINST OILS

This photograph shows a concrete block which was immersed in Oleic Acid for 10 weeks.



This part of the concrete block was treated with Lapidolith Liquid and shows no change.

This part was left untreated and shows the destructive action of Oleic Acid.

It is therefore recommended that wherever concrete is exposed to oils it be treated with Lapidolith Liquid for protection. This includes surfaces in oil refineries, warehouses, garages, machine shops, engine rooms, packing plants, soap factories, creameries, etc. The range of uses for concrete floors and tanks is thus extended, since heretofore their susceptibility to destruction by animal, vegetable, and mineral oils eliminated their use where these oils are encountered.

SONNEBORN'S PATENTED LAPIDOLITH LIQUID IS EASY TO APPLY
NO WAIT. NO DELAY OF PRODUCTION OR USE OF FLOORS.

Concrete floors can be hardened and dustproofed with Lapidolith Liquid with no more effort than required for a simple washing of the floor. The floors can be used during the application. They should be dry, clean, and free from dust, oil, or paint. New floors must be thoroughly set and dry before applying Lapidolith Liquid.

Concrete of average density requires about one gallon for each 100 sq. ft. of surface for the three applications. If floors are made of colored cement or terrazzo send for special directions. Full instructions on how to apply Lapidolith Liquid simply and easily are furnished with every shipment.



For over 25 years, Lapidolith Liquid has been regarded as a most efficient and dependable treatment for the hardening and dustproofing of concrete. Here is a partial list of satisfied users:

CALIFORNIA	IOWA	Fisher Brothers Building	Madison Square Garden	Bell Telephone Company of Pa.
The Sunshine Company	The Oliver Farm Equipment Co.	General Motors Corporation	Ingersoll-Rand Company	West Penn. Power Co.
A. Fleishhacker & Company	KANSAS	J. L. Hudson Company	Life Savers Corp.	Joseph S. Finch Co.
CONNECTICUT	University of Kansas	Parke, Davis & Co.	Neisner Bros. Co.	Jesuit Novitiate
McKesson & Robbins, Inc.	Kansas State College	University of Detroit	NORTH CAROLINA	RHODE ISLAND
New Departure Mfg. Co.	Dr. Pepper Bottling Co.	U. S. Rubber Company	McCrary Mills Co.	Patton-MacGuyer Co.
Aetna Life Insurance Co.	Southwestern Bell Telephone Co.	Consumers Power & Light Co.	Duke Power Co.	SOUTH CAROLINA
G. Fox Company	Sears Roebuck & Co.	MINNESOTA	Horton Motor Lines	Citadel
Hartford Electric Light	KENTUCKY	Cream of Wheat Corp.	Duke University	Clemson College
Electrolux Corp.	Schenley Distillers Corp.	Land O'Lakes Creameries, Inc.	Burlington Mills	TENNESSEE
Duke Laboratories, Inc.	LOUISIANA	University of Minnesota	Proximity Mfg. Co.	Gray Hosiery Mills
Norma-Hoffman Bearings Co	Pan-American Petroleum Corp.	MISSISSIPPI	P. H. Hanes Knitting Co.	Borden Mills
Town of Stratford	Maison Blanche	Junior & Senior High Schools	Taylor Tobacco Company	General Shoe Corp.
The Wiremold Company	Tulane University	MISSOURI	OHIO	M. E. Publishing House South
DELAWARE	MARYLAND	Lincoln University	Ohio Edison Company	Vanderbilt University
Hercules Powder, Inc.	Calvert Distillers Corp.	Johnson, Stephens & Shinkle	Ohio University	VIRGINIA
E. I. duPont deNemours Co.	Johns Hopkins Hospital	Shoe Co.	Ohio Power Company	Virginia Polytechnic Institute
duPont High School	University of Maryland	Stanley Rea Serum Company	Crampton Canneries, Inc.	Greyhound Bus Terminal
GEORGIA	Celanese Corp. of America	Essex County Vocational Schools	Kroger Grocery & Baking Co.	Dan River Mills
Southern Bell Telephone Co.	Doughnut Mach. Co. of America	NEBRASKA	Procter & Gamble Co.	Coca Cola Bottling Co.
Pacolet Manufacturing Co.	Pangborn Corp.	Wells-Abbott-Nieman	Republic Steel Corporation	Newport News Shipbuilding &
ILLINOIS	Bethlehem Steel Co.	NEW HAMPSHIRE	Ohio State University	Drydock
American Car & Foundry Co.	MASSACHUSETTS	Public Service of N. H.	Dayton Rubber Mfg. Co.	American Radiator Company
Chicago Stadium	Boston Elevated Railway	NEW JERSEY	Frigidaire Div. of General Motors	Philip Morris & Co., Ltd., Inc.
Clearing Industrial Dist.	Danvers Bleachery Pequot Mills	Jersey Central Power & Light Co.	Miami University	Southern Biscuit Co.
Commonwealth Edison Co.	Holyoke Street Railway Co.	Blair Academy	The American Rolling Mill Co.	Dr. Pepper's Bottling Works
De Normandie Laundry	General Electric Co.	U. S. Coast Guard	Wrenn Paper Co.	Visco Corp. of America
Owens-Illinois Glass Co.	Municipal Stadium	Congoleum-Nairn, Inc.	Val Decker Packing Co.	WASHINGTON
Marshall Field & Co.	Rubberoid Company	Essex County Vocational Schools	Selby Shoe Company	Bemis Bro. Bag Co.
Notre Dame High School	Cranberry Canners, Inc.	Y. M. C. A.	Hinde & Dauche Paper Co.	WEST VIRGINIA
Wurlitzer Organ Company	United Electric Company	Y. M. H. A.	La Salle Koch Co.	Kanawha Valley Bank Building
The Cradle	MICHIGAN	Y. W. H. A.	Toledo Edison Company	Harker Pottery Co.
Western Clock Company	Kellogg Company	Julius Forstmann Corp.	The Ohio Match Co.	C. & P. Telephone Co.
Lundstrom Furniture Co.	Ford Motor Company	Wright Aeronautical Corp.	OKLAHOMA	
INDIANA	Great Atlantic & Pacific Tea Co.	Merck & Co., Inc.	Dewey Portland Cement Co.	
Indiana University	Bell Telephone Company	NEW YORK	PENNSYLVANIA	
Evansville College	Briggs Manufacturing Co.	Grumman Aircraft Corp.	Standard Pressed Steel Co.	
Mead Johnson & Co.	Cadillac Motor Car Division	Drake Bakeries, Incorporated	McKeesport Tin Plate Co.	
Eli Lilly & Company	Chevrolet Motor Division	Brooklyn Borough Gas Co.	Municipal Stadium	
Seagram Distillers Corp.	The Diesel-Wemmer-Gilbert Corp.	Seversky Aircraft Corp.	Omar Bakeries	
Bendix Aviation Corp.	Detroit Creamery Co.	Remington Rand, Inc.	Frozen Foods & Storage Corp.	
	Detroit Edison Company	The Upson Company	Sun Oil Company	
	The Detroit Free Press		Aluminum Co. of America	
				WYOMING
				Midwest Refining Co.

Use these other Sonneborn Quality Products to keep your buildings at their best

FOR FINISHING AND PROTECTING WOOD FLOORS

Lignophol—one application preservative and finish; easy to apply; easy to maintain; long term performance without retreatment; low unit cost.

FOR GIVING CONCRETE FLOORS A DECORATIVE FINISH

Cemcoat Filler and Dustproofer—for giving floors a tough wearing coating; in colors and transparent; long-lasting durable finish.

Other tested treatments for patching and repairing old or new floors are also available.

FOR WAXING FLOORS

Liquid, paste and rubless types.

FOR CAULKING

Airproof, non-shrinking, waterproof compounds; particularly adapted for caulking around window frames and door jambs, waterproofing cracks and crevices in concrete, etc.

FOR PAINTING OF INTERIORS AND EXTERIORS

Paint, Varnish, Enamel and Protective Coatings. A suitable, efficient type of product and finish available for walls, ceilings, equipment, etc.; for masonry, wood, and metal surfaces.

FOR ROOF PROTECTION

Stormtight and other tested protective coatings to meet various conditions.

FOR WATERPROOFING

Hydrocide for masonry waterproofing and dampproofing foundations. Colorless Hydrocide for exterior walls above grade.

• • •

For full details on any of the above quality products and for complete catalogue of all Sonneborn Maintenance Products please write to our main office. Our Technical Service Department is available for "on the spot" assistance in overcoming especially troublesome problems. This service is available on request and involves no obligation.

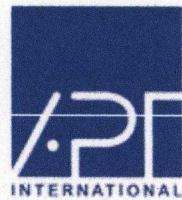
Where Results Count—Count on Sonneborn

L. SONNEBORN SONS, INC.
88 LEXINGTON AVE.
NEW YORK, N. Y.

TIMELY INFORMATION

The application of Lapidolith Liquid will not interfere with your working schedule. The floors can be kept in use during and directly after the application of Lapidolith Liquid, if necessary.

Digitized by:



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL

www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

NATIONAL
BUILDING
ARTS
CENTER

<http://web.nationalbuildingarts.org>